



About Company

Optida Co Ltd was established in 1997 and is the largest optical coating company in Lithuania. Since the beginning we were accumulating valuable coating production experience, expanding human, hardware resources, range and quality of our optical coatings. Company is continuously developing and manufacturing broad range of optical components as well as custom coatings suitable for various laser systems and optical devices. The main products are dichroic beamsplitters, polarizers, polarizing beam cubes, dielectric mirrors, antireflective coatings, precision interference filters, metal mirrors, etc.

"Optida" has close collaboration with Lithuanian applied research institutions like Department of Optical Coatings at Institute of Physics, Laser Research Center at Vilnius University and Lithuanian laser companies, which together belong to Laser and Light Science and Technology Association (www.ltoptics.org).

Capabilities

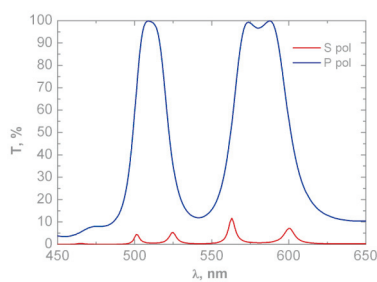
- 200-5000 nm spectral range
- e-beam evaporation with/without Ion Assisted Deposition (IAD)
- room-temperature coating processes (using IAD)
- in-situ optical broadband monitoring during the coating process
- state-of-the-art coating software for custom coating simulation
- substrate dimensions: from 0.1 mm thickness to 300 mm diameter
- Coatings on various kind of substrates: BK7, Fused silica, any kind of silica and glasses, Sapphire, CaF₂, LiF, Silicon wafers, laser rods (Nd:YAG, Nd:YVO, Alexandrite, Yb:KGW, Yb:KYW, Ti:Sap, YCOB, YAP etc), nonlinear crystals (KTP, LBO, BBO etc.)
- repolishing service could be offered together with coating for optical components refurbishment

Optical Coatings Development

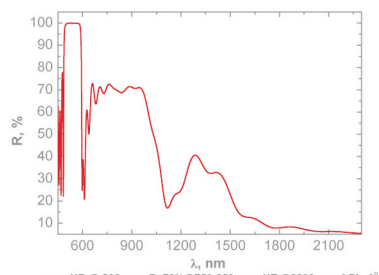


During the last decades various light sources become more and more important part in many industries and consumer products. Scientists and engineers regularly develop and integrate innovative technologies to utilize lasers or light emitting diodes as light sources in advanced applications. Optical coatings are one of the most important part enabling to manipulate the light: reflect, split into multiple beams, reduce reflection losses, combine few light beams, split polarizations, compensate group delay dispersion, etc. Development of sophisticated optical coatings, suitable for new, innovative light applications always include optimization of several important steps: choosing suitable coating technology, coating design, materials, substrates, coating deposition strategy, etc.

Optida offers various optical coatings and development services for optical components according to custom requirements of scientists and engineers. Optida researchers and engineers take a part in coating technology research activities, cooperating with various research institutions and improving existing or integrating new technologies.

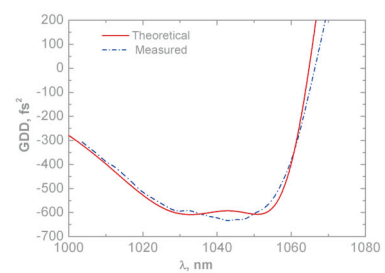


Example of polarizing coating for few wavelengths simultaneously



— HR @ 532 nm +R=70% @750-950 nm +HT @2000 nm, AOI=0°

Example of complicate spectral beam splitter with partial splitting



Example of negative dispersion mirror

Special developments of coatings are necessary in different applications dealing with broadband spectrum, polarized light, ultrafast pulses, high energy pulses. Optida continuously works in development of such complex coatings, like broadband mirrors, non-polarizing or broadband beam splitters, high contrast spectral separators, polarizers for one or few wavelengths simultaneously, coatings with negative group delay dispersion or group velocity dispersion optimization for ultrafast applications, coatings for ultraviolet range or infrared range.